

Chapter Ten

Too Little—Too Much Water and the Tombstone Story

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Introduction

The great wealth of the silver strike at Tombstone quickly drew mines and miners to an area of little or no water. Fire and need induced the construction of substantial water works at about the same time that the ever-deepening mines first struck, and then began to pump water. Refusal to help out a competitor resulted in the shutdown of the mines as water reclaimed them.

Consolidation of ownership solved the competition problem, but pumping eventually proved too expensive and once again the pumps were shut down, probably as the result of sabotage by the owners, leaving the arguable, most famous boom town in the mineral west, only a shell and a memory of the fantastic boom days.

If a famous scholar appeared in Arizona today, stating that in most ways water is the one element that controls the development of our area, no one would be surprised; it is doubtful that the press would even take much notice of such an obvious prognostication. Historians also have long recognized the unique set of facts that applies to Arizona, and have given it a name: "Oasis urbanization," meaning that the situation is such that only an oasis, whether natural or man made, can support any substantial population in our desert areas.

In certain cases however, great wealth has induced the overcoming of substantial obstacles when that wealth was not located near an oasis. Such a case was the famed Tombstone: city of the tourist trap name, gunmen, legends, and the original Hollywood morality play. Once one has gotten past the above trappings of immortality and begins to think seriously on "what happened here" it is at once apparent that there is very little or no water at that location and it becomes instructive to look carefully at just what the effects of water, and the lack thereof, were, on a late 19th century silver boom town.

To restate the obvious, mining takes water and people and in turn those people take more water, thus mining developers are immediately faced with filling a very fundamental need. The marvelous thing about the American economy is that in many cases it can supply these needs without advance planning; thus it was that on the heels of Ed Schieffelin's strike the boomers came to the proto-Tombstones of Hog-Em, Gouge-Em, Watervale, and other

tent communities. Over a period of some months these whimsically named communities coalesced into "Tombstone," so named due to the advice given Schieffelin by one of the soldiers at Ft. Huachuca to the effect that all he would ever find in those hills east of the San Pedro would be his own tombstone.

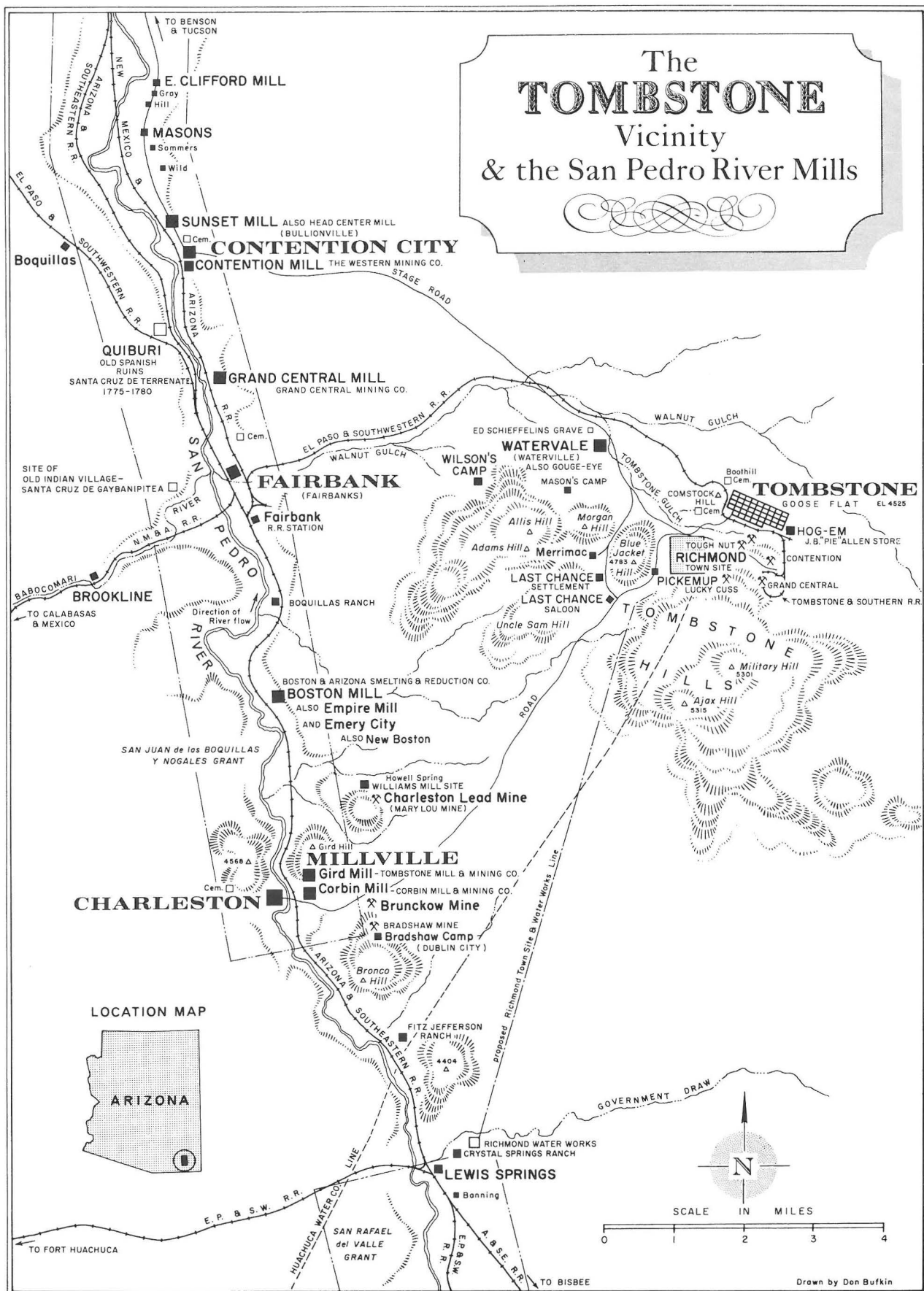
As an editorial aside, it is fun to speculate as to the fate of the place had it retained its original name of "Goose Flats." Somehow it is harder to envision the famous gunfight taking place there, much less the interest of hordes of tourists.

During this very early era the miners quenched their thirst (or at least washed their clothes!) in water hauled into town on the backs of burros and sold by the bucket, from Watervale; so named of course from the fact that water was available there. The site of this early tent community lies about two miles west of town quite near Schieffelin's Monument. Schieffelin had probably made his original camp here, attracted by the small spring.

Water from Watervale, peddled by the bucket, supplied barely enough for drinking and cooking, perhaps for the first year of the boom, or until the population reached 700-1,000, but was never a satisfactory supply for any purpose other than these.

A slightly more sophisticated delivery system quickly sprang up beside the burros from Watervale, that of a tank-equipped wagon which hauled water from Sycamore Springs near the foot of the Dragoon Mountains some eight to ten miles north of town. While sale was still "by the bucket," at least there was now enough volume to enable those either wealthy enough or dirty enough to occasionally take a bath. Once again however the source proved less than satisfactory. At one point a company was formed to build a pipeline from Sycamore Springs. However, only the stock promoters ever seriously believed that Sycamore Springs could supply the water demanded by the ever-burgeoning population (by 1880 about 5,000), not to mention additional needs from the industrial sector.

As anyone knowledgeable of mining knows, the milling process takes water in enormous quantities. Thus the mine owners never even considered that the seeps at Watervale or Sycamore Springs could supply enough for their needs and so located the mills on the San Pedro River, the largest at Charleston about nine miles to the



southwest, and at Contention, about twelve miles to the northwest. Thus there were created two full blown towns and several millsites, not to mention the need for many service industries such as freighting, harness making, livery corrals, etc., all required to get the ore from the mine to the mill.

Once set up and operating, this system was satisfactory but all concerned would have liked to have had things better. The mine owners felt they could do without the expense of hauling the ore, and the city fathers worried about fire.

And the city fathers should have worried about fire. Every nineteenth century boom town in the American west except one was burned at least once. Preservationists were fond of pointing out to site managers that there were very few existing buildings in places such as Tombstone, which were actually original. Georgetown, Colorado was the exception; it had never burned and all the buildings were original. However this day of grace ran out and in the mid-1970's burned to the ground.

Tombstone's turn came on June 22nd, 1881. At about 4 p.m. the proprietors of the Arcade Saloon rolled a barrel of bad whiskey to the front of their building to measure the contents. A bartender with a cigar caused an explosion and by 6 p.m. fully one-third of the business district lay in ruins. The "*Epitaph*" carried a list of 66 stores, saloon, restaurants and businesses that were devastated by the fire.

Almost as swiftly as the fire had come and gone, the place was rebuilt; no small accomplishment. Rebuilt just in time to burn down again in an even larger fire. This time it started in the water closet of the Tivoli Saloon and spread rapidly over the business district. But let the prose of the *Epitaph* speak for itself:

FULL PARTICULARS OF THE FIRE

"Once again has the fiery demon of destruction spread his baleful wings over the fateful town of Tombstone, and once again within a year has the bonanza camp been visited by the fiery scourge. Yesterday morning the bright sun rose over as happy and prosperous a camp as any on the Pacific coast. Ere the God of day sank behind the western hills a scene of desolation and destruction met the eye in every direction. The blackened walls and smoking ruins of what were once handsome and beautiful buildings is all that remains of what was the very heart of Tombstone. The business portion of the town has been destroyed and many a man and woman too, who yesterday was in affluent circumstances, find themselves today reduced to poverty. The baleful fates which seem to hover over us, have once more thrown a deadly blight on our progress and prosperity. But despite the frown of Fortune the bonanza city will rise Phoenix-like from its ashes and in a few short weeks what are now smouldering ruins will be built up and ready for business. Below we give a succinct account of the origin and progress of the great fire. No pen can describe the scenes and incidents of the fearful conflagration. The fiery flames rose high in the heavens while dense volumes of smoke obscured the light of day, and made Tombstone look like a hell on earth. The shrieks of women, and the imprecations of men, the mad rushing of vehicles, and the indescribable confusion, was a scene long to remember."¹

Once the danger was past the editor expressed thoughts on the progress of the town:

"Such has been the effects of the most destructive conflagration that has yet visited Tombstone. Its depressing effect on the camp cannot be denied, but we feel sure that the depres-

sion will be only temporary and that the burnt district will be rebuilt and in a more solid and substantial manner than ever before. Already preparations are being made for the erection of fireproof structures. So long as the marvelous mines of this camp continue to send forth their treasure, so long will the town of Tombstone exist and flourish."²

One month later, Tombstone was rebuilt again.

Then in the July 22nd edition we read of yet another fire. The headline says it all:

'A fierce battle with the Flames — A young man seriously burned — hurrah for Huachuca water!'"³

Twenty minutes after the alarm was given the fire was out and Huachuca water was indeed the difference.

Responding not only to the obvious need of the town for a reliable potable water supply, but also to the dire need for fire protection which had been emphatically brought home by the first fire (which had had to be fought with nothing more than wet blankets), the Huachuca Water Company had finally supplied the town with water.

After securing the rights to the water in the springs at the head of Miller Canyon in the Huachuca's, the company built a reservoir in the canyon, then followed with construction of a seven-inch pipeline over the twenty one miles from there to the hill above Tombstone. The change of elevation gives excellent pressure and assures an adequate flow for almost any purpose. This system still supplies about half of Tombstone's water today, the city having taken over the bankrupt company in 1947.

If the completion of the Huachuca Water Company line had assured the residents a water supply, nature had been even kinder to the mine owner. Or so they thought. Let the *Epitaph* tell it:

The Water Strike

"An *Epitaph* reporter was yesterday afternoon despatched to the Sulphuret mine to learn the truth regarding the reported heavy flow of water encountered on the 500-foot level. Arriving at the hoisting works he found the 50 gallon bucket ascending and descending with great regularity and a small creek was flowing into the gulch. A score marked up on an adjacent post recorded the fact that 92 buckets (about 4,600 gallons of water) had been hoisted during the "shift" from 7 a.m. until 3 p.m., while from the latter hour until the time of the reporter's visit, (5 o'clock) 22 buckets had been hoisted. Superintendent Farrell shortly after emerged, by no means dry, from the shaft, and stated in response to inquiries that it is yet too early to determine the nature of the "strike." The flow was about one thousand gallons per hour and had been encountered while sinking the main shaft at a point 20 feet below the 500 foot level. Mr. Farrell declined to express any opinion regarding the matter until further time should elapse, but seemed inclined to regard the event as more of an ultimate benefit than otherwise. Several mining men of experience were interviewed regarding the matter, but none of them seemed willing to hazard an opinion as to the permanency of the flow, though they were unanimous in regarding it as a great benefit to the camp in many ways should it prove to be permanent."⁴

Two long-term effects flowed from this "water strike." First, the mining companies gradually moved their smelters from Charleston, Contention, and the other mill towns, ensuring the demise of those places, and casting many of the teamsters employed to haul ore onto hard times indeed.

The second effect was that the mines had simply exchanged one expense for another; instead of hauling ore,

they now began to pump water. Shortly they were no doubt wishing to only have to haul ore again.

By 1882 the water was a serious enough problem to force the closure of the mines while pumps were installed. These were a Newcomen engine type of design, "Cornish Pumps", they were called. One photograph of a lady standing near one reveals a monster of about twenty feet high with a horizontal beam at least that long. The design was imported from England (they were the experts of that day in de-watering mines). None of them survived the scrap drives of WWI and WWII.

Since the pumps, with a total capacity of about four million gallon per day, were fueled by wood, the effects on what few woodlands there were around Tombstone were severe. A study done by the University of Arizona Office of Arid Lands Studies regarding this impact estimates the wood used by the mines for all purposes (smelting, pumping) and for household use, during the boom amounted to almost one half million cords of Oak. The researchers found that records were too skimpy to allow an estimate of Mesquite used, which might in fact nearly double the amount of wood.

As long as the pumps ran, Tombstone let the good times roll. A professor from one of the German universities has attempted to develop a table which will allow the substitution of modern monetary values for ancient ones. While he was primarily interested in comparing medieval florins to modern currency, and his table is not regarded as very accurate, his factor for 1870's U.S. money is 42. In other words, if one takes the conservative estimate of the Tombstone mines production which is \$40,000,000, then multiplying it by 42 should yield the approximate modern value, or 1.7 billion dollars. No wonder everyone came to town!

But every dog has his day. On May 12, 1886, fire, which the volunteer fire department was neither equipped nor trained to handle, burned the pumps of the Grand Central Company. Other companies' pumps couldn't quite cope, and they weren't about to operate in such a way as to help the competition anyway; so water reclaimed the mines, laborers left and the town shut down. Mrs. Ethel Macia in later years described the disaster:

"We heard the fire whistles early one morning—I remember how the draft from the shaft blew a column of flame and smoke high in the air. you could hear it roar. After that the town just fell apart and blew away."⁸

Another later report compared the flame to the burning of a gas well.

And so, populated by only a few die hards, Tombstone's boom ended; not because of outlaws, or Apaches, or the ore ran out, or the "burning sand," but because of the "cool, clear water."

Tombstone, with it's magnificent waterworks, just barely survived, just barely, on what few jobs county officials and county political patronage could provide.

In the meantime E.B. Gage, former manager of the Grand Central Mine, had quietly consolidated the ownership of almost all the mines in the Tombstone District under the aegis of the Tombstone Consolidated Mines Company. That enterprise required fifteen or more years,

but as a new century dawned, new and bigger pumps were procured and the mines re-opened, now that competing interests wouldn't kill each other off.

The *Epitaph's* prose was once again purple, or almost so. The editorial page contained the following:

"When the old camp shall have again resumed its wanton (sic) activities—and indications mark the day not far distant—it is freely prophesized that a hundred smokestacks will adorn that many hills; shrill whistles will awaken you at noon, comfort you at eve, and the music of the constantly dropping stamps will lull you to a gentle repose and sweet contentment. Tombstone will be itself again."⁶

I suppose that sentence could be entitled "The Miner's Lullaby!"

With five new pumps running flat out, total pumping capacity of the mines was about ten million gallons per twenty-four hour day from a depth of 1,000 feet! That kind of pumping turned Tombstone Gulch and Walnut Gulch into perennial streams.

In 1903 the railroad arrived and prosperity seemed assured. The boilers gulped fuel at the rate of one car load per day, while 30 to 40 cars per day of ore were shipped out, and that didn't count some of the dumps that were being re-worked.

Even though the ore grades coming out of Tombstone's mines held up remarkably well, the boom couldn't last.

In 1909 the miners struck, demanding \$4.00 per ten-hour shift instead of \$3.00. The price of silver declined at the same time. Nevertheless, the mines continued to operate, until one day the empty car of fuel was disconnected, the line of tank cars moved forward to spot the next one, the flow turned on, only to destroy the boilers. The car contained ordinary sea water! With the boilers ruined, the pumps quit, and water reclaimed the mines which shut down, forever.

There are two things in Tombstone's history that I am certain of, although I have not one shred of evidence to support my position. One is that the Earps came to Tombstone intending to dominate law enforcement offices in order to take over gambling. That has nothing to do with the subject at hand. The other thing is, that the mining company ordered the sea water. Logic makes that conclusion inescapable, for even though a motive is impossible to fathom, tank cars are filled at refineries, which to my knowledge don't have much sea water around. Neither does SPRR make a habit of shipping cars that were not ordered.

Ironical indeed! That they chose to kill the mines with water!

Footnotes

- 1) The Tombstone Epitaph, May 27, 1882- Complete files on Microfilm at University of Arizona Library, Special Collections.
- 2) Ibid
- 3) Op Cit, July 22, 1882
- 4) Op Cit, March 25, 1881
- 5) Martin, Douglas, D., *Tombstone's Epitaph*, University of New Mexico Press, 1951
- 6) The Tombstone Epitaph, February 7, 1906.

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- Parsons, George W., *The Private Journal of George W. Parsons*, Arizona Statewide Archival and Records Project, Works Project Administration, Reprinted by Tombstone Epitaph, 1972.
- Martin, Douglas D., *Tombstone's Epitaph*, University of New Mexico Press, 1951.
- Hattich, William, *Tombstone*, Tombstone Daily Prospector Souvenir Edition to Commemorate the Coming of the Railroad, Tombstone, 1903, Reprinted in book form, University of Oklahoma Press, 1981.
- Bahre, Conrad and Hutchinson, Charles, *The Impact of Historic Fuelwood Cutting on the Semidesert Woodlands of Southeastern Arizona*, The Journal of Forest History, Vol. 29 No. 4, October 1985, pp175-186.
- Tombstone Epitaph, newspaper, Various issues, University of Arizona Special Collections.
- Huachuca Water Company Files, Collection of Company Papers at Tombstone Courthouse State Historic Park, Tombstone, Arizona.
- Miscellaneous Papers, Collection at Tombstone Courthouse State Park.



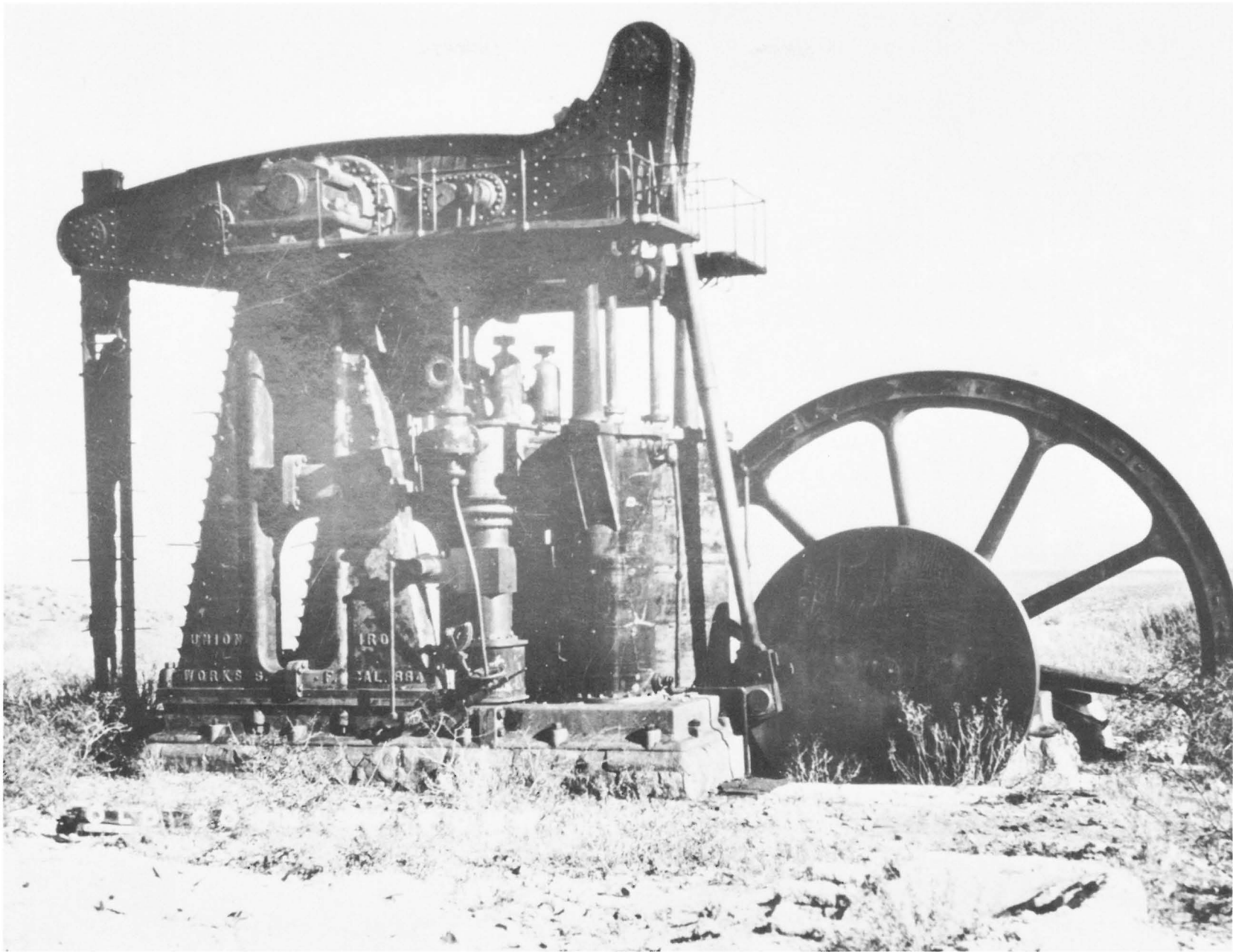
Ed and Al Schieffelin with Dick Gird, founders of Tombstone. Ed seated on right and Al standing. Courtesy of Tombstone Courthouse State Park.



Initial workings in the Toughnut Mine, c. 1882. *Courtesy of Tombstone Courthouse State Park.*



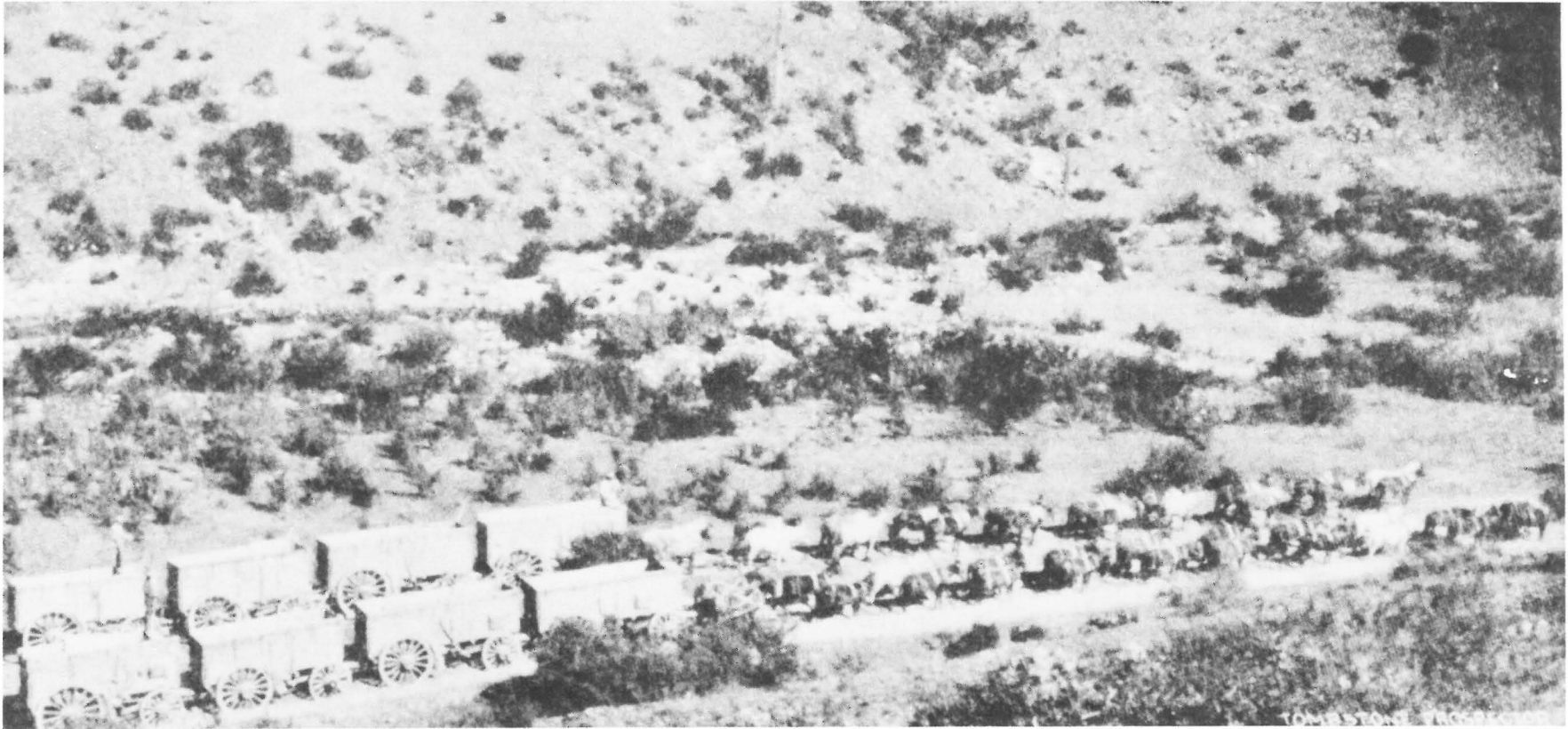
Mill town of Charleston, c. 1881. Charleston was the hangout of many of the famed Tombstone outlaws, . . . "if Tombstone was the town too tough to die, Charleston was the town too mean to live . . ." *Courtesy of Tombstone Courthouse State Park.*



"Cornish" pump used in dewatering Tombstone mines, c. 1885. *Courtesy of Tombstone Courthouse State Park.*



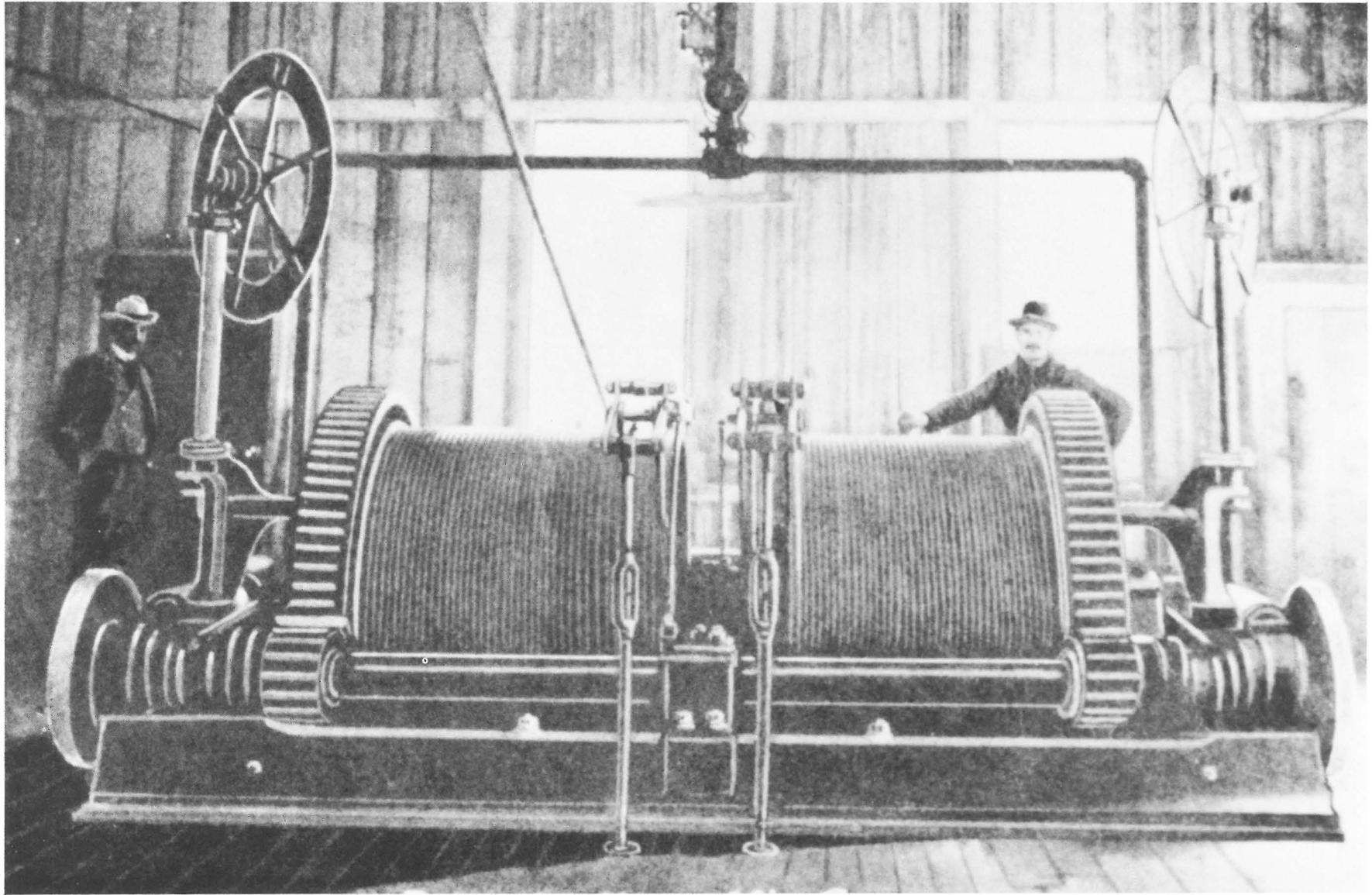
Ore wagons of the type used throughout the west. *Courtesy of Tombstone Courthouse State Park.*



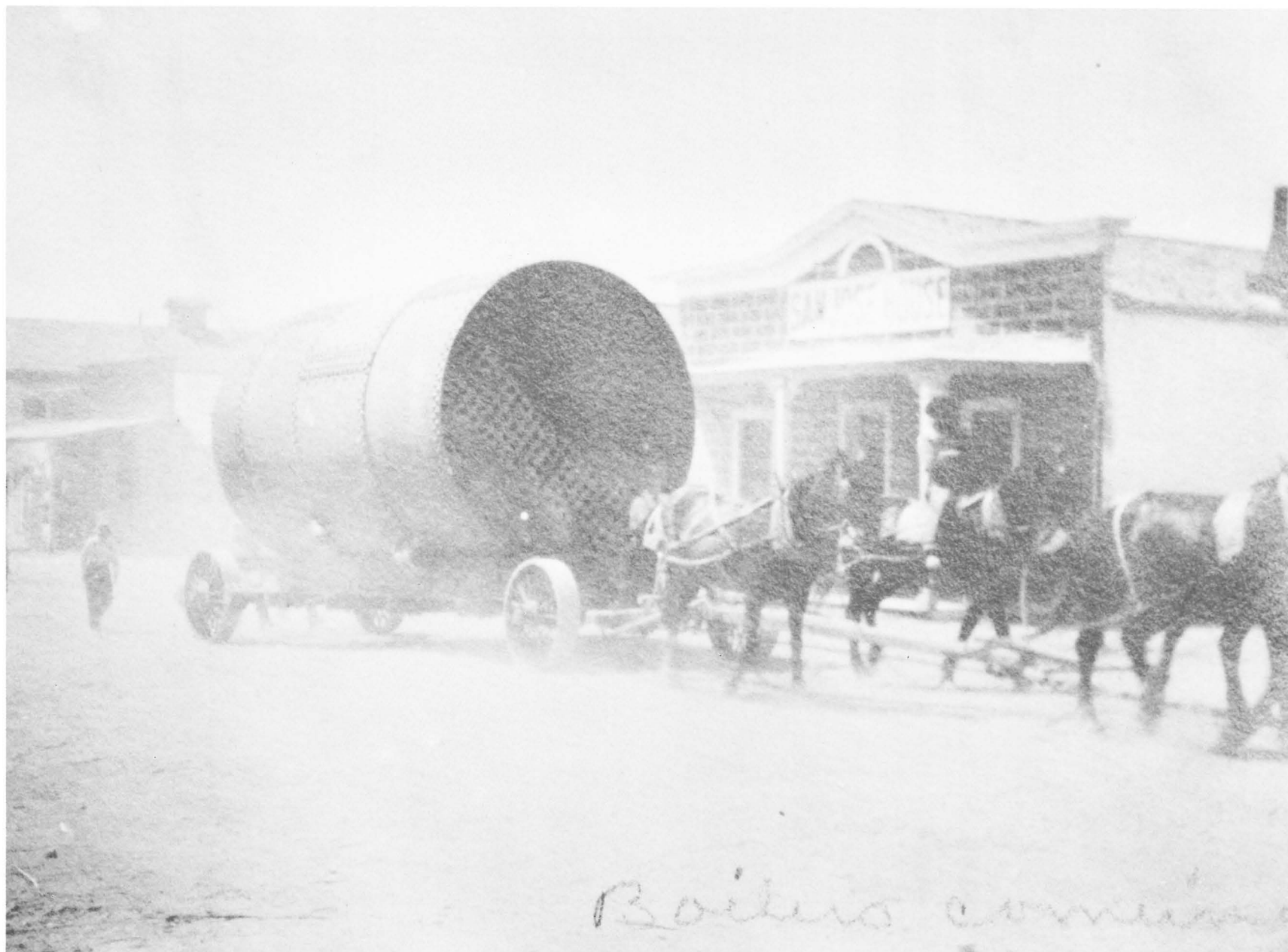
Wagon trains hauling ore from the mines of Tombstone. *Courtesy of University of Oklahoma Press.*



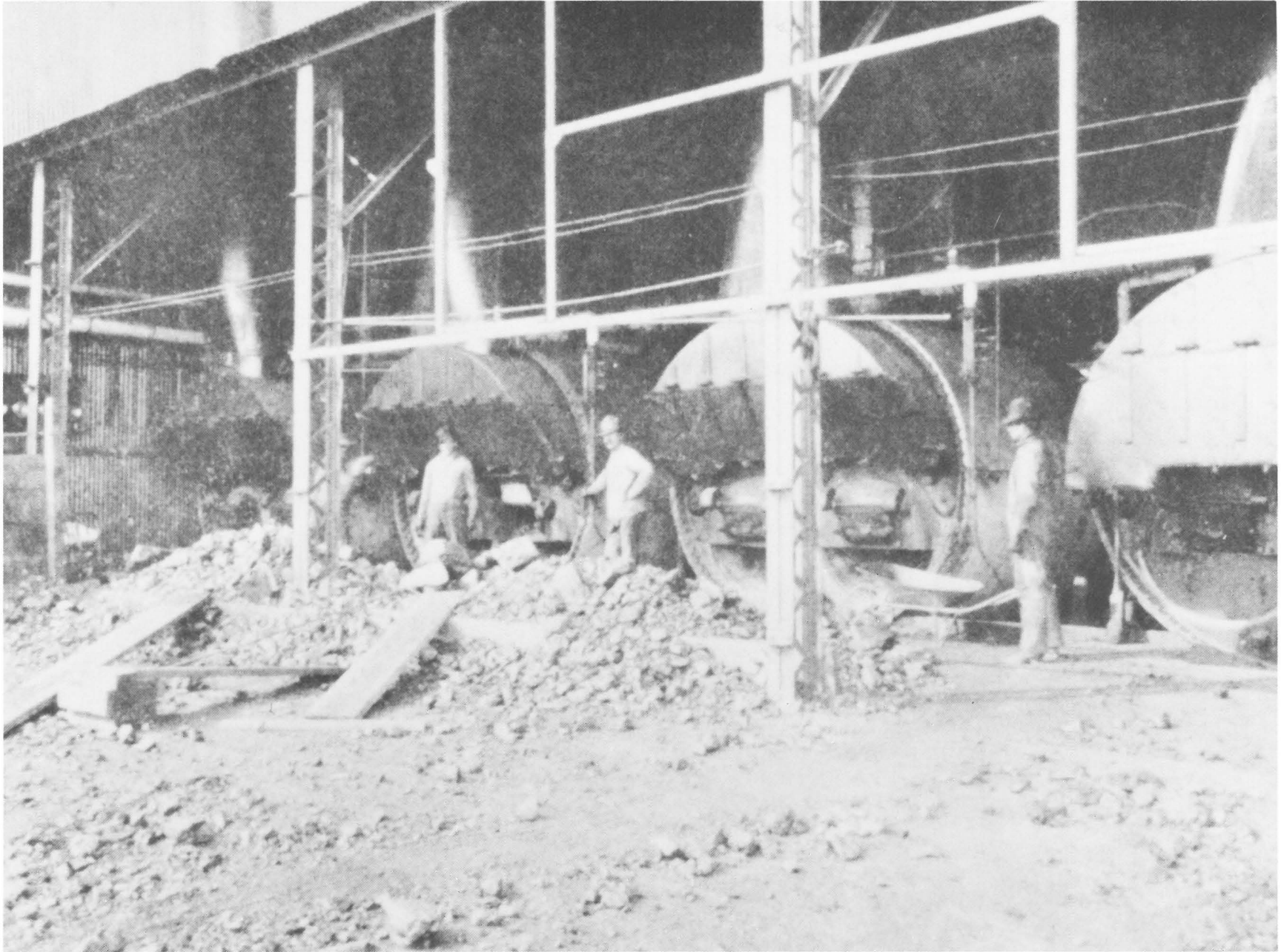
Shift of Bunker Hill mines, c. 1905. Courtesy of Tombstone Courthouse State Park.



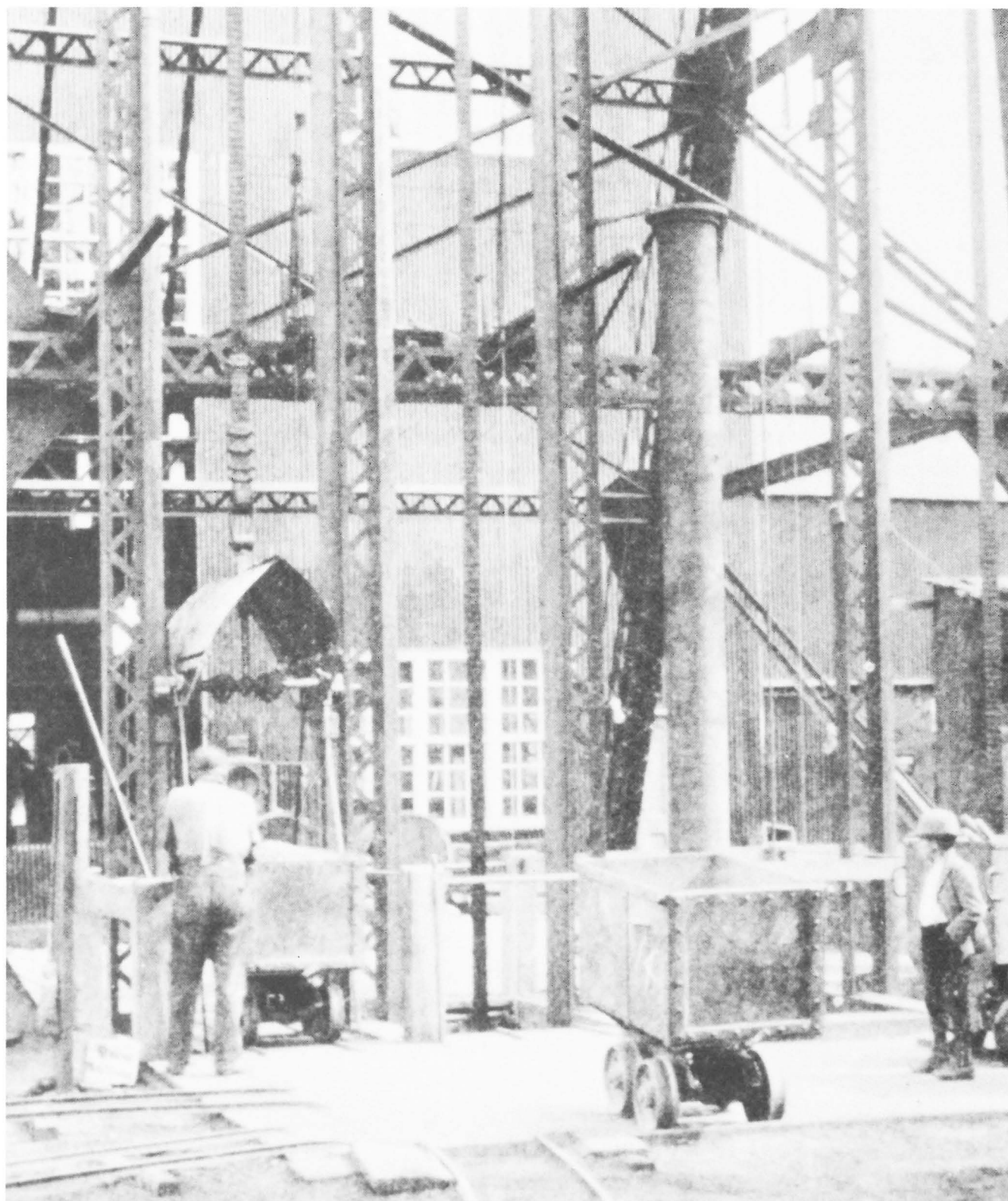
Bunker Hill Mining Co. Interior view of hoisting works. Courtesy of University of Oklahoma Press.



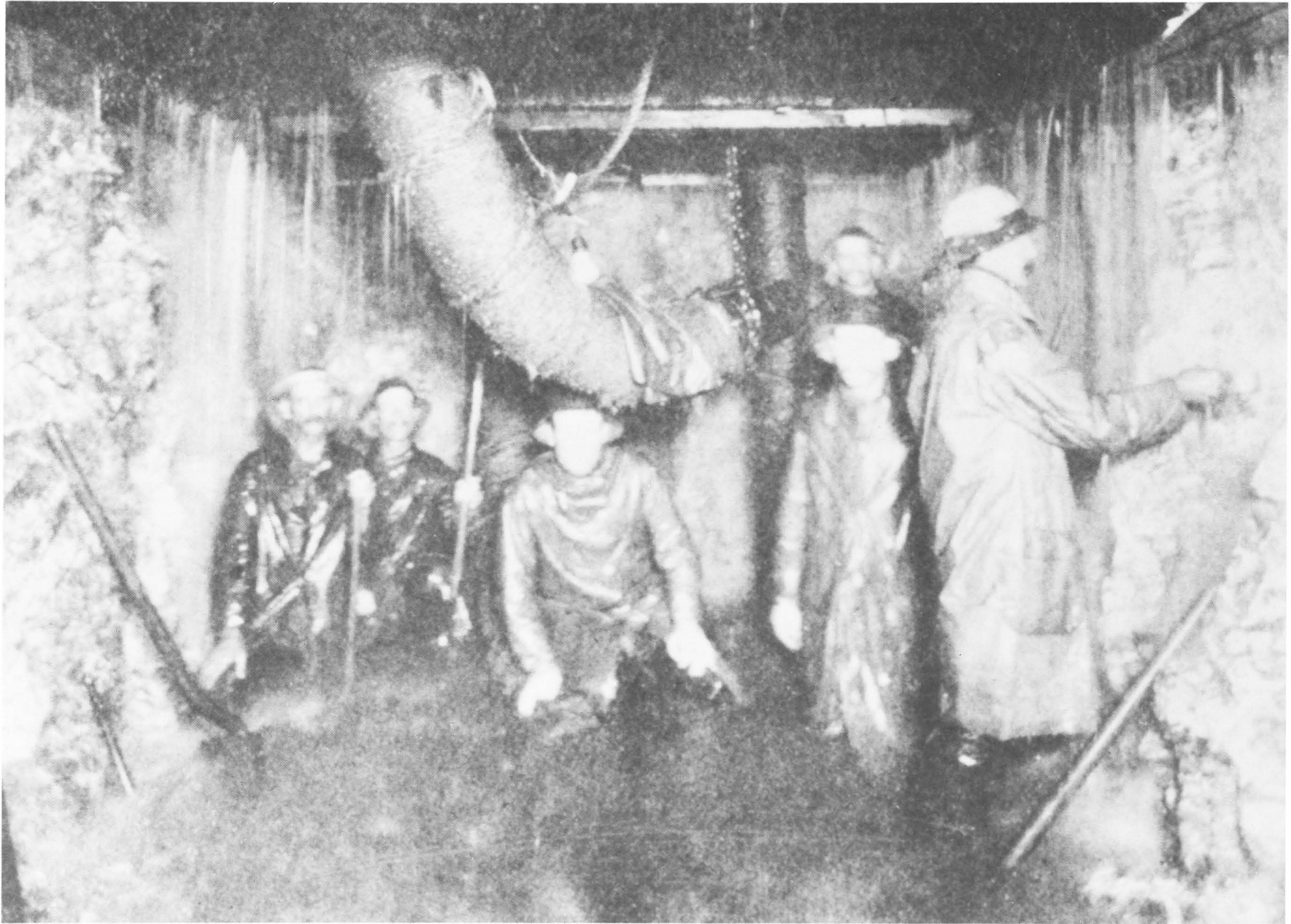
Boilers for Tombstone Consolidated Mines Co. passing down Fremont Street, c. 1905. Courtesy of Tombstone Courthouse State Park.



Arizona's largest boilers—25 tons each. Tombstone Consolidated Mines Co. *Courtesy of University of Oklahoma Press.*



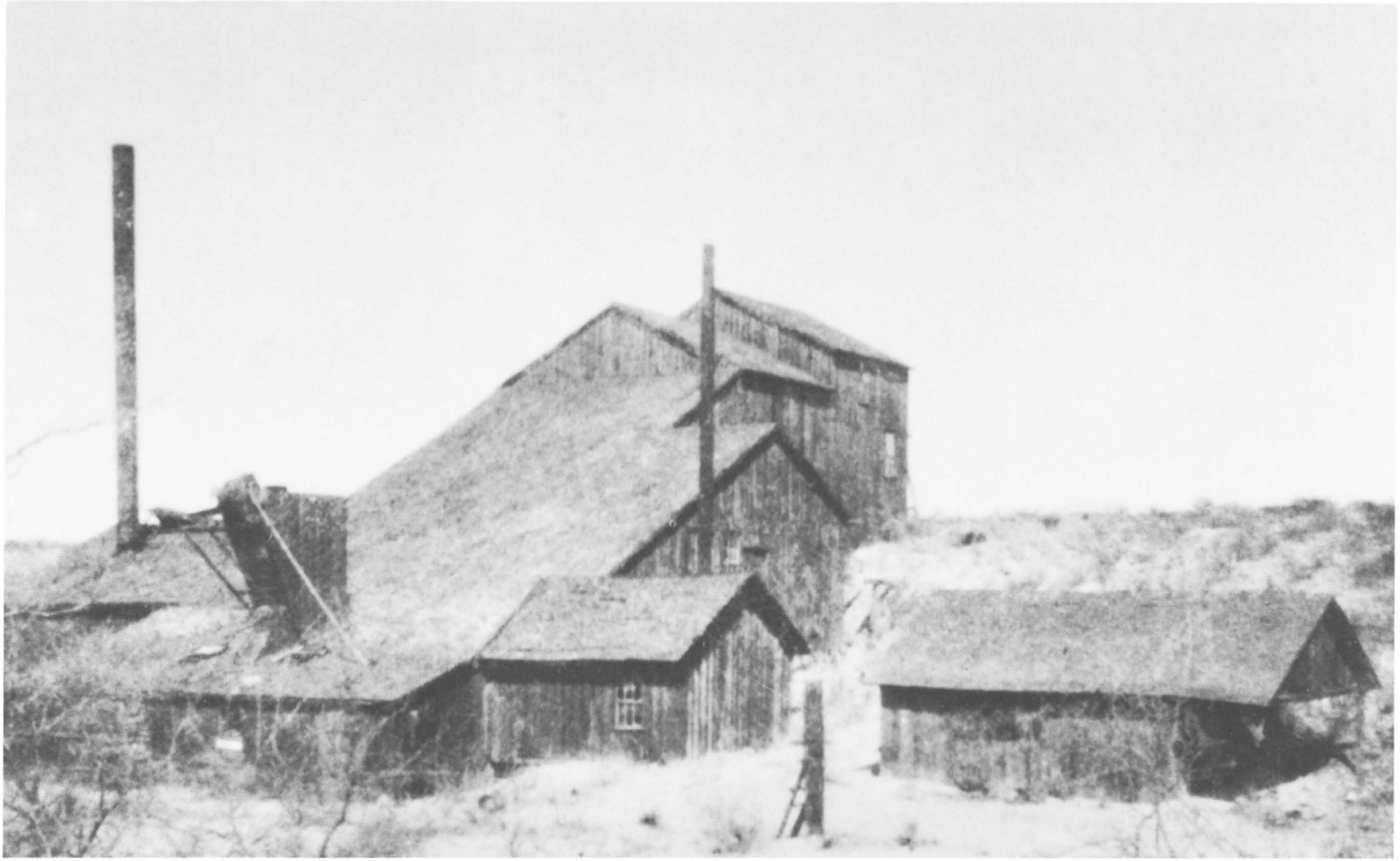
Largest shaft in the west—four compartments, c. 1902. Tombstone Consolidated Mines Co. *Courtesy of University of Oklahoma Press.*



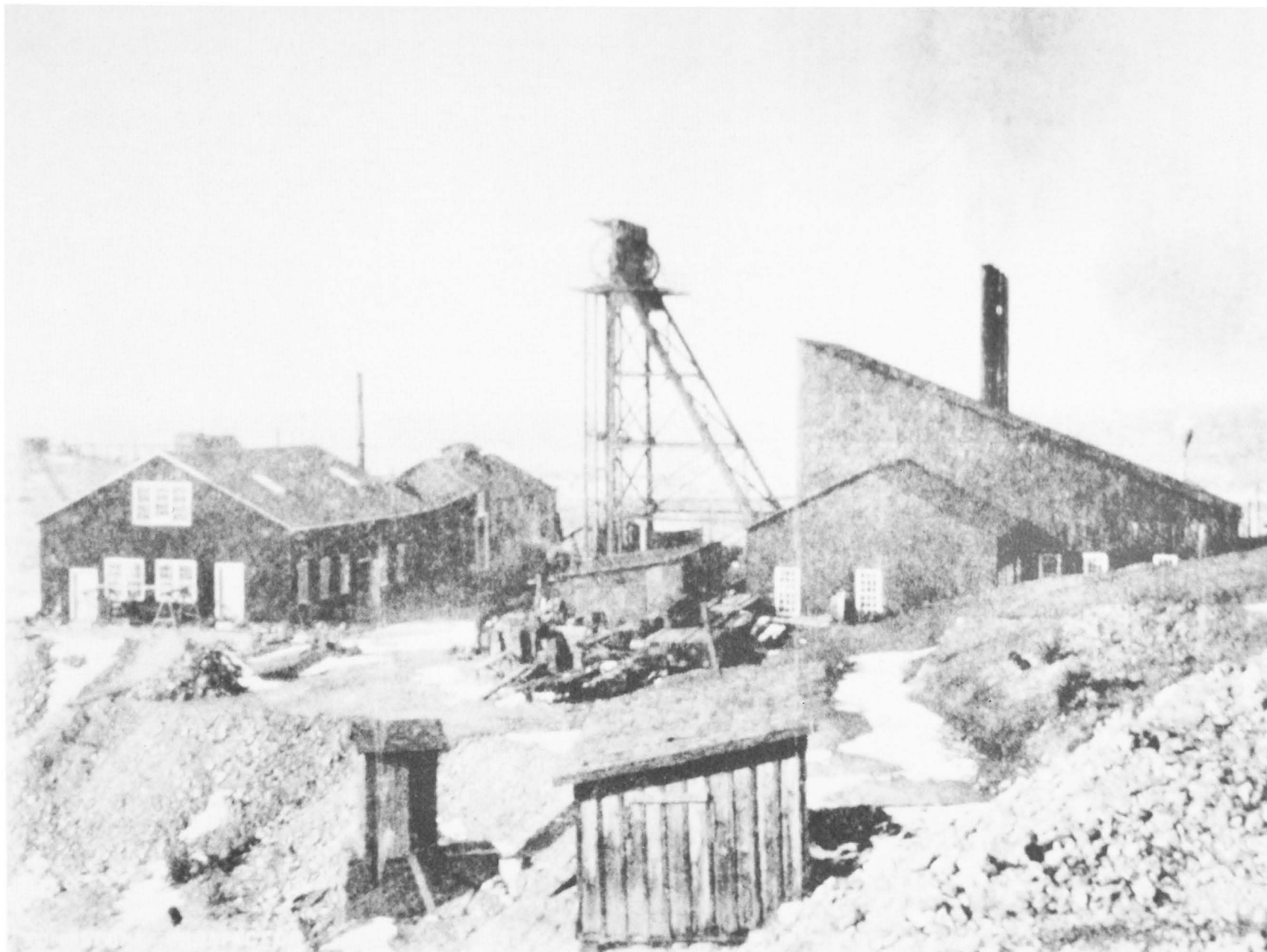
Below water level and pumping 1.6 million gallons per day. Tombstone Consolidated Mines Co. *Courtesy of University of Oklahoma Press.*



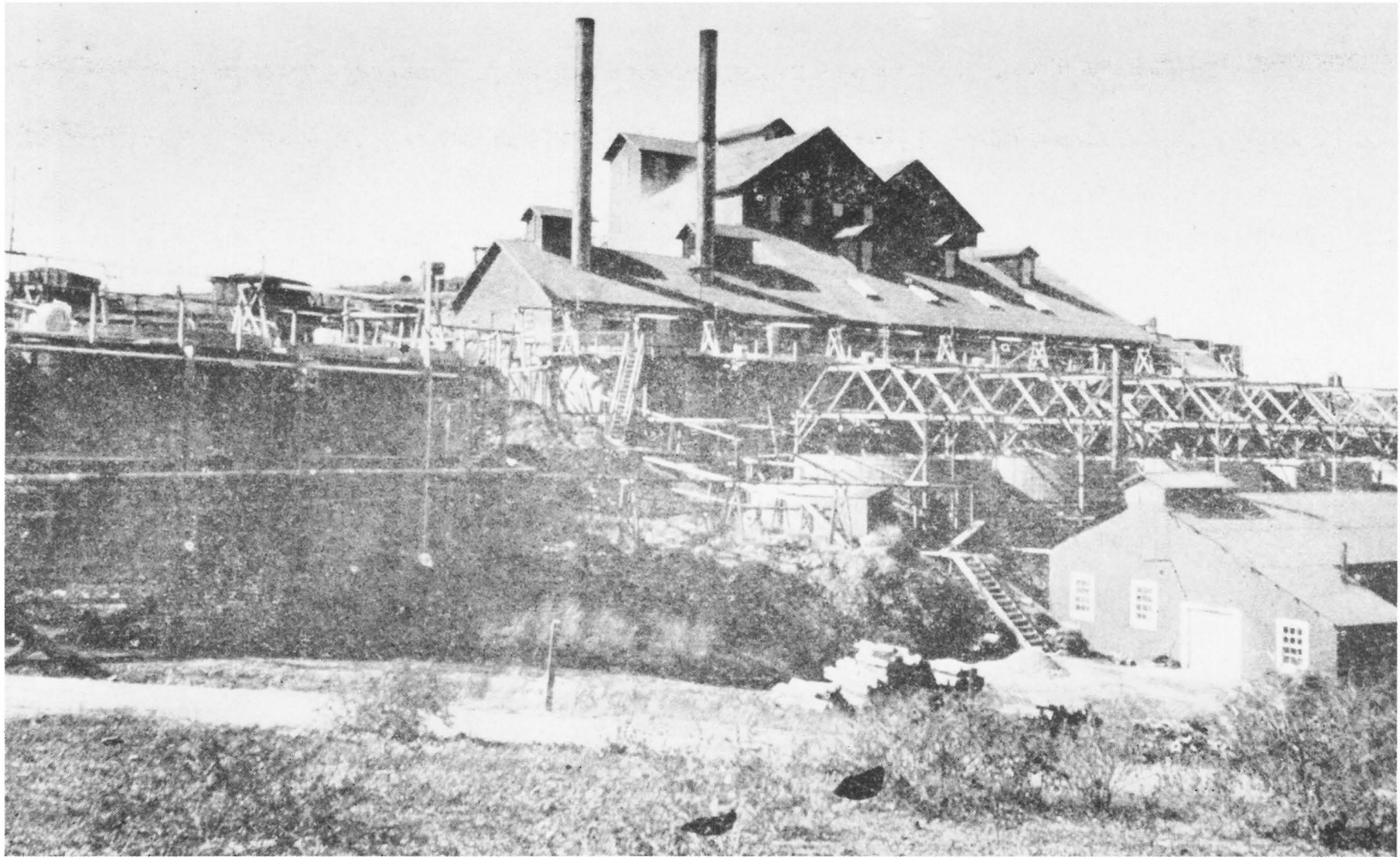
Rare underground photo, taken 1905, "Sulphate Stope", Tombstone. Notice miners' candleholders in use. Courtesy of Tombstone Courthouse State Park.



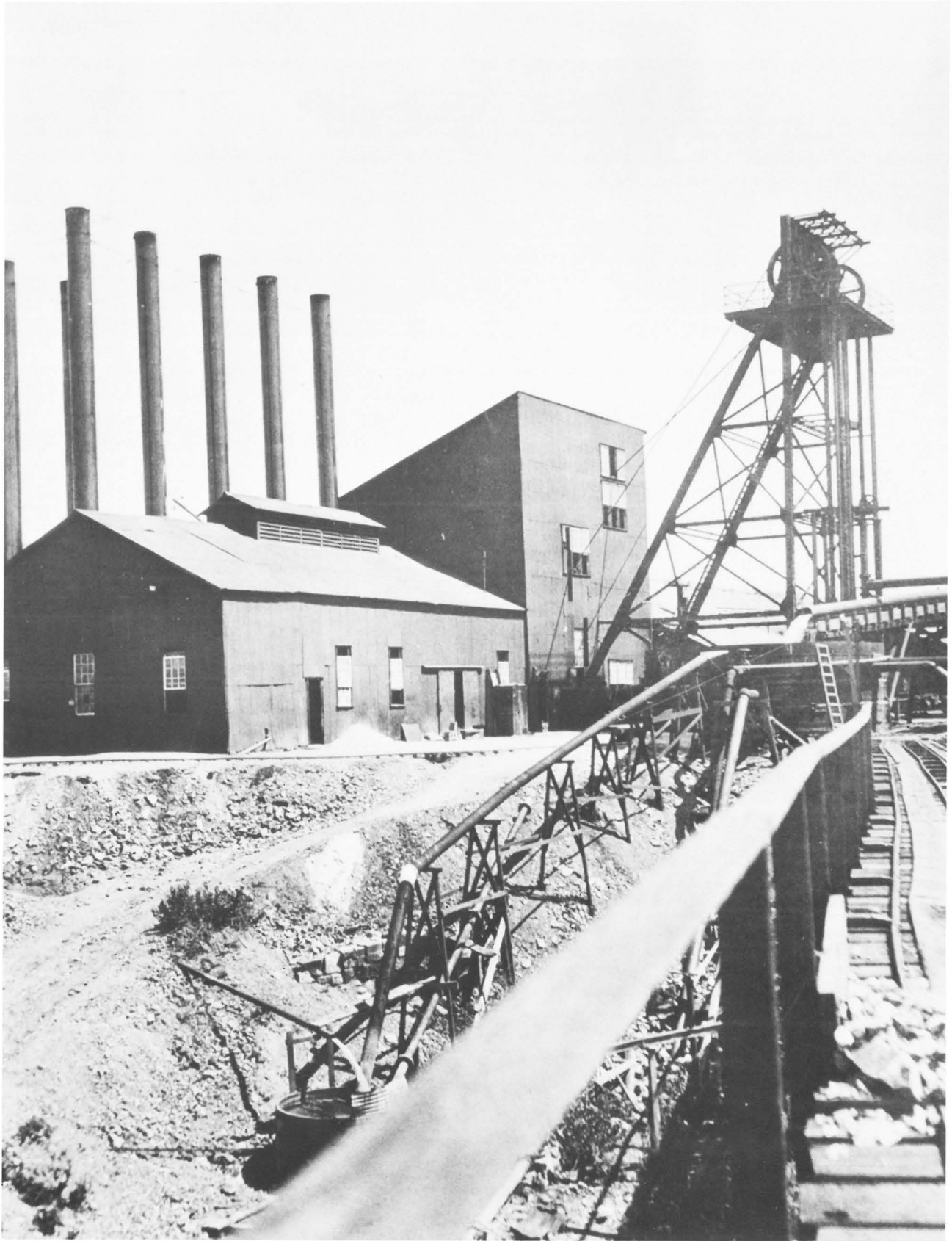
Mill of the Pittsburg-Arizona Mining Co. Courtesy of University of Oklahoma Press.



Headframe of Tombstone Consolidated Mines Co., c. 1902. Courtesy of University of Oklahoma Press.



Tombstone Consolidated Mines Co. concentrator, c. 1905. *Courtesy of Tombstone Courthouse State Park.*



Tombstone Consolidated Mines Co. headframe and mill, c. 1905. Courtesy of Tombstone Courthouse State Park.



Town of Tombstone, looking north, c. 1880. *Courtesy of Tombstone Courthouse State Park.*

HISTORY OF MINING IN ARIZONA

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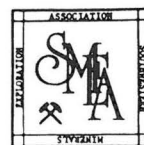


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